

**REMARKS**

The Final Office Action mailed August 23, 2011 has been carefully considered. Applicants have amended Claims 1, 3-5, 10 and 12-13, cancelled claim 2, and added new claims 27-31. No new matter has been added. Reconsideration in view of the following remarks is respectfully requested.

**Rejections under 35 U.S.C. § 112**

The Examiner rejected to claim 1 under 35 U.S.C. § 112, second paragraph, as being indefinite because “the first end face” lacks antecedent basis. Applicants have amended claims 1 to provide antecedent basis. Applicants accordingly request withdrawal of the rejections under 35 U.S.C. § 112.

**Rejections under 35 U.S.C. §§ 102 and 103**

Claims 1, 2, 4-8, 10, 12-16, 26 and 26 stand rejected under 35 U.S.C. § 102(b) as being anticipated by U.S. Patent No. 5,855,801 to Lin et al. (hereinafter “Lin”). Claims 3 and 11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over Lin, and claims 9 and 17 stand rejected as being unpatentable over Lin in view of U.S. Patent Publication No. 2003/0161572 to Johnck et al. (hereinafter “Johnck”). These rejections are traversed.

Lin describes a micro needle made by a semiconductor wafer SOI technology which can be assimilated to the micro injector discussed in the prior art section of the present application.

Lin does not disclose electrical connections located at the first end face of the body, as required by claims 1 and 10. The examiner asserts that the contact pads 36 are the claimed electrical connections. The contact pads 36, however, are not located on an end face of the body. Instead, the contact pads 36 are located on an upper face of the microneedle 10 at the shank end 12 of the interface region 11.

As explained in the present application, by positioning the electrical connections on the first end face of the body, a connection to the electrodes in the body can be provided while limiting the bulkiness of the implantable micro-device. This enables, for example, the insertion of the micro-device into a guiding system.

Lin also fails to disclose a micro-device having *lateral* canal outputs, as required by claim 1. The Examiners points to the disclosure at col. 10, ll. 16-29 of Lin for support for this disclosure. However, Lin does not disclose here any *lateral* output. As shown in Figure 8B, the output of the channels 126 is the opposing end face. In contrast, as shown, for example, in the Figures of the present application (e.g., Figures 1-4), the output of the secondary channels is lateral (i.e., on the sides of the body). In other words, the outputs of the secondary channels are lateral canal outputs.

The Examiner asserts that the body is shaft 14 of Lin. The Examiner fails to point to any disclosure in Lin for the body having a quadrilateral-shaped cross section. As clearly shown in Figure 1B of Lin, the shaft 14 does not have a quadrilateral-shaped cross-section.

Johnck also fails to disclose these limitations. Johnck merely describes the detection of a capillary electrophoresis system with laser fluorescence. The Johnck device is not a micro-diagnosis or therapy device that is implantable. Furthermore, one skilled in the art would not combine the Johnck device, which is not implantable, with Lin to arrive at the presently claimed device which is implantable.

Thus, the cited art fails to teach or suggest all of the limitations of independent claims 1 and 10. Claims 2-9, 11-17 and 25-26 depend, directly or indirectly, on one of the foregoing independent claims. Applicants accordingly request withdrawal of the rejections under 35 U.S.C. §§ 102 and 103.

**Conclusion**

It is believed that this reply places the above-identified patent application into condition for allowance. Early favorable consideration of this reply is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the number indicated below.

Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Please charge any additional required fee or credit any overpayment not otherwise paid or credited to our deposit account No. 50-3557.

Respectfully submitted,

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